

Appl. No. 09/821,858
Amendment Dated April 7, 2004
Reply to Office Action of January 7, 2004

In the Claims:

Claim 1 (Previously Presented). A device for the recombination of hydrogen and oxygen in a gas mixture, comprising:

a heating chamber;

a number of heating elements for heating said heating chamber;

a number of flow pipes, each of said heating elements disposed within a respective one of said flow pipes;

a feed line for feeding a gas mixture having a hydrogen content with a parameter characteristic, into said heating chamber;

a blower connected in said feed line and having a delivery rate; and

a control unit associated with said blower for adjusting the delivery rate of said blower in dependence on the parameter characteristic for the hydrogen content of the gas mixture; and

an internally insulated housing containing said heating chamber.

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Claim 2 (Original). The device according to claim 1, including a hydrogen sensor for determining the hydrogen content of the gas mixture, said control unit having an input side connected to said hydrogen sensor.

Claims 3-4 (Canceled).

Claim 5 (Original). The device according to claim 1, wherein said heating chamber has a downstream side, and a reaction chamber is connected at said downstream side of said heating chamber.

Claim 6 (Original). The device according to claim 1, including a static mixer connected downstream of said heating chamber.

Claim 7 (Previously Presented). The device according to claim 6, further comprising:

a reaction chamber for containing a recombination reaction disposed downstream of said static mixer; and

a duct system connected to said reaction chamber, contacting said static mixer, and carrying a partial stream of the gas mixture heated as a result of the recombination reaction to heat said static mixer.

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Claim 8 (Canceled).

Claim 9 (Currently Amended). The device according to claim 8 1, wherein said heating chamber has a downstream side, a splash cooler is connected on said downstream side of said heating chamber, and said splash cooler has a housing directly connected to said internally insulated housing in which said heating chamber is disposed.

Claim 10 (Previously Presented). The device according to claim 1, wherein the parameter characteristic is a temperature value of the gas mixture flowing out of said heating chamber; and

a temperature sensor connected to said heating chamber and said control unit measures the temperature value of the gas mixture flowing out of said heating chamber.

Claims 11-13 (withdrawn).

Claim 14 (New). The device according to claim 1, further comprising a deflecting device connecting to said recombinator unit downstream of said feed line and said heating chamber; said internally insulated housing continuously surrounding said recombinator unit to said deflecting device.